K. FREEMAN.

Fence-Post Boring-Machine.

No. 227,757. Patented May 18, 1880.

Fig. 1.

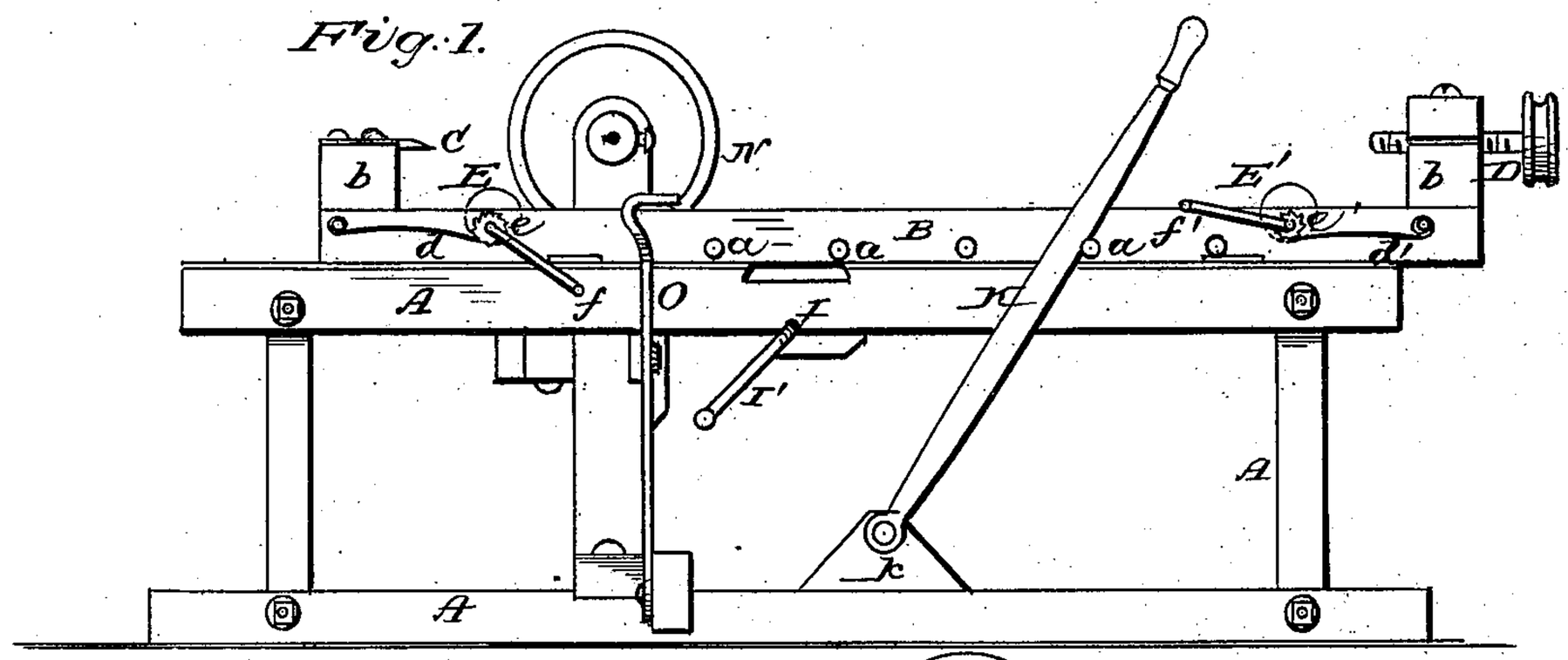



Fig. 2.

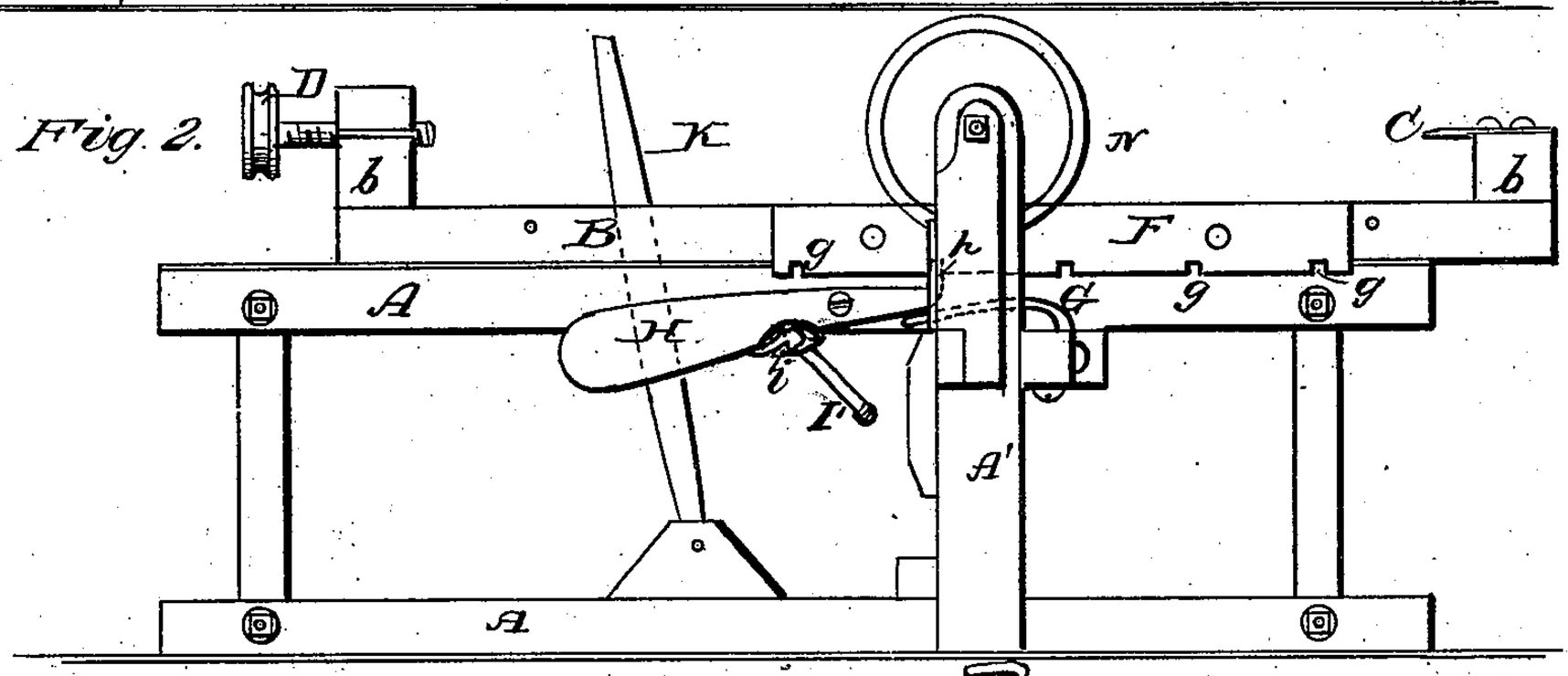



Fig. 3.

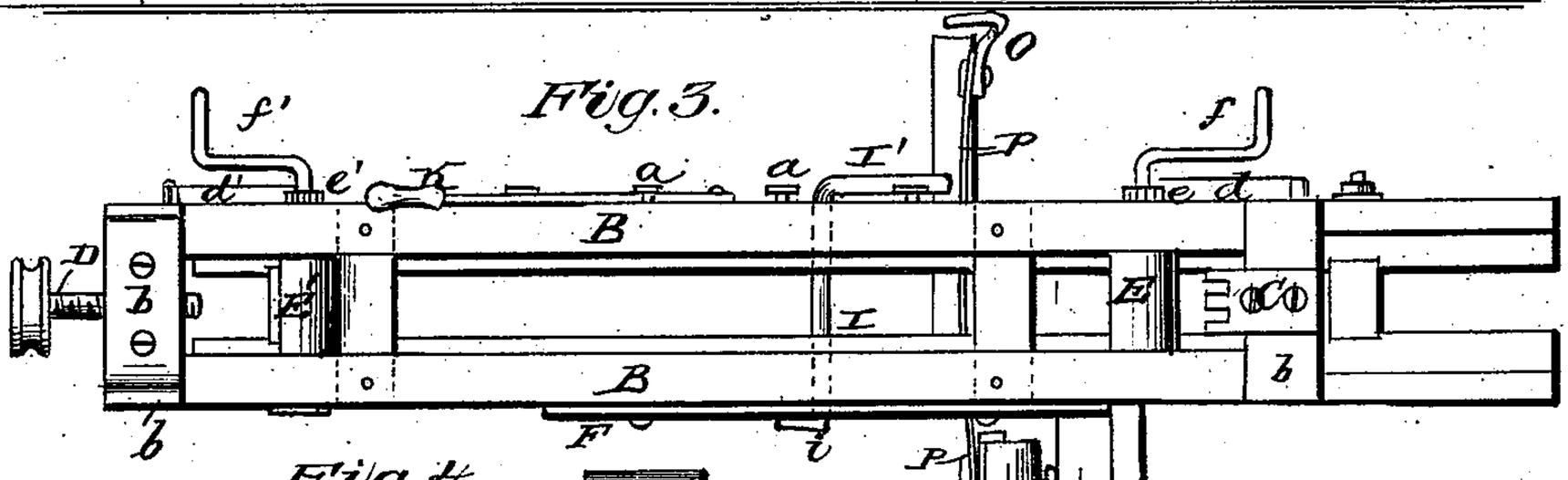
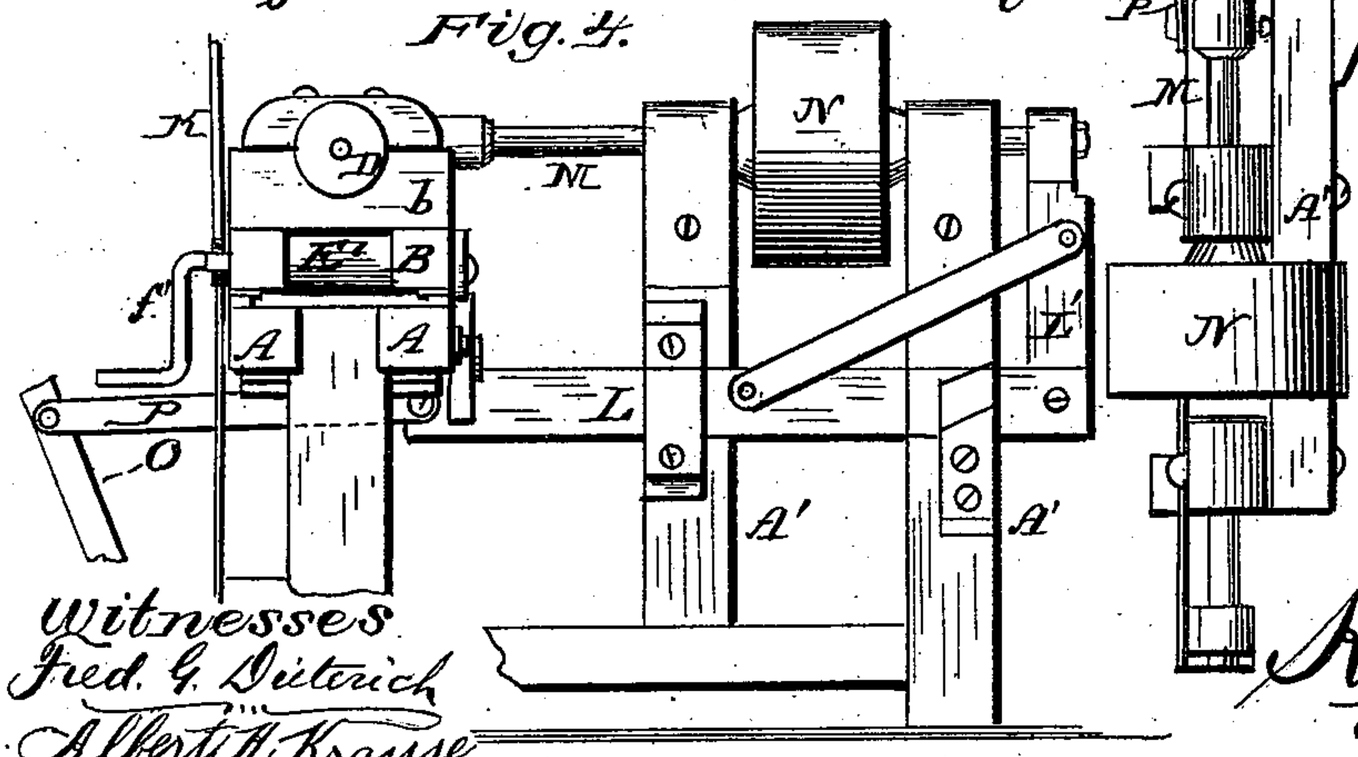



Fig. 4.




Witnesses
Fred. G. Dieterich
Albert A. Krause

Inventor
Kasson Freeman
by Louis Bagger & Co
attorneys

# UNITED STATES PATENT OFFICE.

KASSON FREEMAN, OF GRAND RAPIDS, MICHIGAN.

## FENCE-POST-BORING MACHINE.

SPECIFICATION forming part of Letters Patent No. 227,757, dated May 18, 1880.

Application filed February 9, 1880.

*To all whom it may concern:*

Be it known that I, KASSON FREEMAN, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Machines for Boring Fence-Posts; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figures 1 and 2 are elevations representing opposite sides of my machine. Fig. 3 is a plan or top view, and Fig. 4 is an end elevation.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to machines for making fences, and more especially to the boring of fence-posts for the insertion of the rails, boards, or pickets, according to the style of fence it is desired to make.

To this end it consists in the construction and arrangement of parts of a machine of this class, as hereinafter more fully described, and particularly pointed out in the claims.

In the drawings, A is the frame or bed of the machine, upon which is mounted a sliding carriage, B, having a raised part or block, *b b*, at each end, and provided with the dog C and jam-screw D. E E′ are eccentric bearings journaled in opposite ends of the carriage B, and operated by cranks *f f′*, which are provided with ratchet-wheels *e e′*, engaging with spring-pawls *d d′*, as shown more clearly in Fig. 1 of the drawings.

Upon the opposite side of the carriage, Fig. 2, is secured a notched board or marker, F, the notches *g* of which engage with the lip *h* of a weighted lever, H, pivoted upon the side of the frame and operated by a spring, G. Lever H may be disengaged from the marker F by means of a cam, *i*, secured upon the end of a shaft, I, which is operated by its arm or lever I′.

On that side of the carriage opposite to the marker is a series of projecting pins or lugs, (denoted by *a a a*,) against any one of which the long lever K may be placed in pushing the carriage forward or backward upon its table after disengaging it from lever H. This lever K has its fulcrum in a block, *k*, secured upon the under part or sill of the frame A.

Projecting at right angles from one side of the main frame is an auxiliary frame, A′, which supports a sliding bar, L, having an elbow, L′, at one end, in which is journaled the auger-shaft M, operated by the pulley N. Shaft M is made with a longitudinal groove, within which works a rib or feather on the pulley, so that this may turn the shaft, while at the same time it (the shaft) is enabled to slide through the central bore in the pulley. Bar L is connected to a lever, O, by a connecting-arm, P, so that by operating said lever O the head of the auger shaft or arbor, with the auger inserted into it, may be brought against the carriage gradually and easily.

From the foregoing description, taken in connection with the drawings, the operation of my machine will readily be understood.

The post to be bored is placed upon the carriage with its ends resting upon the eccentric bearings E E′, which are then adjusted by turning their cranks *f f′* so as to bring the middle part or line of the post opposite to the auger, or its two ends opposite to the dog C and screw D, respectively, after which it is fastened upon the carriage by turning the screw until it bears against the end of the log, so as to hold it firmly in place. Next, the carriage is slid down to one end of the table until the lip of lever H catches into the last notch of the marker F, and the auger is now brought against the post sidewise by operating lever O. After the hole has been bored the auger is pushed back from the post, lever H is released from the marker by turning crank I′ so as to lift the weighted end of the lever, after which the crank is again let go, and the carriage is slid forward by means of lever K until the lock-lever H engages with the next notch in the marker by the dropping of its (the lever's) weighted end, when its lip *h* is opposite to and enters the next notch *g* in the marker. The auger is now again brought into play, and so on until the requisite number of holes, equidistant from each other, have been bored in the post, when it is removed from the carriage and another takes its place, after which the carriage is, by degrees, slid back to its starting-point while the holes are being bored, and

so on until a sufficient number of posts have been bored.

It is obvious that the use of this machine is not limited to the boring of fence-posts, but that it may be employed with advantage for other purposes. Thus, in the construction of a picket-fence the pieces of scantling which reach from post to post may be bored, a number at a time. upon this machine, to form equidistant holes for the insertion of the pickets.

It is also obvious that an auger of any size may be used, according to the style of fence it is desired to make. Thus, for a post-and-rail fence, a four-inch auger should be used to make holes in the post sufficiently large for the insertion of the overlapping ends of the rails; for a board fence, half of the holes are bored with a two-inch auger and the other half with a one-and-one-fourth-inch auger. A mortise is then made, and the ends of the boards are inserted and overlapped in the mortises made with the large holes, breaking joints with the upper boards, which are slipped through the narrow mortises singly.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The sliding carriage B, having end blocks, *b b*, provided with the dog C and screw D, eccentric bolsters or bearings E E′, operated by cranks *f f′*, ratchet-wheels *e e′*, and spring-pawls *d d′*, all constructed and arranged substantially as and for the purpose herein shown and described.

2. In combination, the carriage B, constructed as described, and provided with the pins *a a a* and notched marker F, lever K, weighted lock-lever H, having lip *h*, spring G, and shaft I, having cam *i* and crank or lever arm I′, substantially as and for the purpose herein shown and set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

KASSON FREEMAN.

Witnesses:

CREYTON J. POST,

FRANK M. CARROLL.